REMARKS

The current application includes claims 50-58 with claim 50 being the only independent claim. Claims 1-49, 51-53 and 59-66 have been previously cancelled. Claim 50 is amended herein. Dependent claims 67-73 have been newly added herein.

In the Non-Final Office Action dated June 20, 2007, claims 50-56 and 58 were rejected under 35 U.S.C. Section 103(a) as being unpatentable over U.S. Statutory Invention Registration H1745 to Paraschac (hereinafter referred to as "Paraschac") in view of U.S. Patent No. 6,039,733 to Buysse (hereinafter referred to as "Buysse") in further view of U.S. Patent No. 6,248,124 to Pedros (hereinafter referred to as "Pedros"). Claim 57 was rejected under Section 103(a) as being unpatentable over Paraschac, Buysse and Pedros further combined with U.S. Patent No. 6,096,037 to Mulier (hereinafter referred to as "Mulier"). In response to the Office Action, it is respectively submitted that amended independent claim 50 and its respective dependent claims are allowable.

Independent claim 50 is generally directed to a cardiac tissue ablation apparatus. The apparatus comprises first and second jaw assemblies which are relatively movable between open and closed positions, respectively, to receive and compress cardiac tissue therebetween. Each jaw assembly has a clamping surface with a width and an elongated electrically conductive member for ablating tissue between the jaw assemblies. The conductive members of the jaw assemblies are in face-to-face relation and connectible to a bipolar energy power source so as to be of opposite polarity when so connected for providing an electrical current through a selected tissue ablation area that is located between the jaw assemblies. Each conductive member has a tissue

contacting portion which has a width that is less than the width of the clamping surface of its associated jaw to contact at least a portion of the selected ablation area.

As further recited in claim 50, each jaw assembly includes at least one interior jaw support member and includes an insulative cover that surrounds the internal jaw support member.

The claimed apparatus beneficially provides for the formation of controlled ablation line(s) in heart tissue to create scar tissue that blocks the pathway of an abnormal electrical impulse (i.e., an abnormal heart rhythm such as atrial fibrillation) without substantially impairing the function of the heart tissue. In the claimed invention, the ablation line is created using electrical energy such as bipolar radiofrequency (RF) energy that is applied to the conductive members carried by the jaws of the ablation device.

A benefit of the claimed ablation apparatus is to provide ablation energy to the tissue between the closed jaws only to the extent to disrupt or break the pathway of the aberrant electrical impulse. Among the benefits provided by the present application, the claimed invention forms a relatively narrow line of ablation that avoids other damage to cardiac tissue. The claimed invention avoids damage that may result from coagulation or sealing of tissue walls together, as in the cited references. The claimed insulative cover that surrounds the internal jaw support member also beneficially insulates the internal jaw support member from the conductive member and avoids electrical arcing that may otherwise interfere with providing a relatively narrow line of ablation.

By way of example, the application shows and describes an ablation apparatus at Figures 28- 32, which includes an internal jaw support member (e.g., stainless steel

structural support 82) which is "completely encased by insulating members 84, 86, 88" or an insulative cover. Paragraph 108; See Figure 32. Another example is shown and described with respect to the alternate embodiment of Figures 35-40, which includes at least one internal jaw support member (e.g., fixed members 132, 134 and fixed bridge 142 and/or drive members 136, 138 and drive bridge 144) which are surrounded by a respective insulator and cap 122, 124, 128, 130. Paragraphs 113-114; See Figures 38-39.

Cited References Do Not Teach or Suggest The Claimed Invention

The Examiner relies upon the combination of the structures disclosed in Paraschac, Buysse and Pedros to reject independent claim 50. However, it is respectfully submitted that such combination does not teach or suggest the claimed invention, as amended in claim 50. In particular, none of these references, either alone or in combination with one another, teach or suggest the claimed structure of the jaw assembly, inter alia, wherein each jaw assembly includes at least one internal jaw support member and includes an insulative cover that surrounds the internal jaw support member. (Emphasis added).

Turning first to Paraschac, Paraschac does not disclose or suggest a jaw member that is surrounded by an insulative cover, as recited in the present claims. To the contrary, Paraschac's jaw member is only partially surrounded by a cover, in each of the disclosed embodiments. For example, Paraschac's insulators 26, 28, 146, 156 do not extend around the entire perimeter of their respective jaw members, see Figures 3 and 5. --e.g., at column 4, lines 28-33:

> Since insulators 26 and 28 do not cover the entire outer surface 32 and 34 of conductor 21 and 22 respectively, leaving outer electrodes 29 and 39, a small portion of the current will flow outside the region between grasping surfaces 27 and 36, coagulation tissue outside that region and providing visual confirmation of coagulation. (Emphasis added).

Indeed, any insulative cover for Paraschac's entire jaw perimeter would be contrary to the intended purpose of Paraschac – namely, to provide a cutting current to tissue disposed between the jaws. Paraschac jaw members 21, 22, 147, 148 are the electrodes themselves and require direct and intimate contact with the tissue disposed between the jaws to conduct electrical energy through such tissue – indeed, Paraschac's electrodes also conduct current through other tissue by providing a visible coagulation region in tissue disposed outside the jaws. (Column 4, lines 26-33).

To surround Paraschac's electrode with an insulative cover would inhibit the operation of Paraschac's device and prevent Paraschac from achieving its objective, namely, to provide a wide treatment zone that essentially spans the entire width of (and outside of) the jaws. Thus, any such modification would be counterintuitive to Paraschac's purpose to provide an electrosurgical cutting tool, and, as such, it is respectfully submitted that the claimed invention would not have been obvious in view of Paraschac.

Both Buysse and Pedro fail to fulfill the deficiencies of Paraschac. Neither reference has any disclosure regarding an insulative cover for any jaw member – let alone a jaw member surrounded by an insulative cover. Wholly void of disclosure regarding an insulative cover for any jaw, Buysse and Pedro cannot fulfill the deficiencies of Paraschac.

Since Buysse and Pedro are completely void of any disclosure regarding an insulated jaw member (let alone a jaw member surrounded by an insulative cover) the skilled artisan would have no reason to combine Buysse and/or Pedro with Paraschac under any Post-KSR rationale to support a legal conclusion of obviousness.

In balance, it is respectfully believed that none of the references relied upon by the Examiner in this application, either alone or in combination with other references, render the claimed invention obvious.

Conclusion

For all the above reasons, reconsideration and allowance of claim 50 and its respective dependent claims are respectfully requested.

Respectfully submitted,

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